

# MOUNTAIN LIFE and WORK

Volume II

October, 1926

Number III

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# SOUTHERN Mountain Life <sup>A N D</sup> Work

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## MOUNTAIN LIFE AND WORK

*Arthur T. McCormack, M.D.*

It is peculiarly appropriate that a magazine with the title of this one should dedicate one of its numbers to health work in our southern mountains.

One has but to view the natural beauties of these mountains—the sides and tops with their wonderful foliage, the valleys with their little cultivated bottom lands, the myriads of wild flowers varying with the seasons—to realize the charm of this section. When it has roads and schools and, above all, health, it will become one of the famed sections of the world.

Without roads and with poorly developed schools in most of its sections, it has remained undeveloped until within the last decade. But the influence of interests like Berea has been carried back through its schools to its people, and now, with the developing road system, what has been an unknown land will soon be a paradise to travelers from all outside. The mountain towns of Kentucky are growing faster than any other section of the State, water and sewage systems are developing, hookworm disease has been all but eliminated and trachoma has been reduced from its 60,000 cases in 1910 to less than 3,000 now. With the establishment of the new trachoma hospital at Richmond, conducted by the U. S. Public Health Service, we expect to be able to announce within a few years that no case exists in the state.

Mason, Johnson, Boyd, and Knott Counties have developed effective all-time health departments; half the mountain counties in Kentucky have public health nurses, and nearly all of them have venereal clinics, where those unable to afford private treatment at regular prices secure treatment at actual cost.

It is of first importance that the public schools be improved. No community should support a school which is not better than the average home in the community in the character of the building, in its equipment, and in its sanitary conveniences. Children learn quite as much from environment as they do from books, and if the school grounds and playgrounds are beautiful their influence will soon permeate the home. School gardens should be added as rapidly as possible so that, especially, the winter vegetables will be grown.

Kentucky is proud of its mountains and one may look forward to their leadership in the development of the State in health, as well as in other fields.

## A DREAM

Robert H. Cowley, M.D.

Miss Randolph's article on another page of this issue states very clearly the problem which tuberculosis presents in our mountain counties. It is a problem which can be solved in only one way and that way is the education of the mountain people as to the nature of the disease and the possibility of its early diagnosis and cure.

Every year in the course of our routine examination of the students of Berea College we find several cases of active tuberculosis and we are presented with the problem of what to do with these unfortunates. Perhaps two cases which I have met in my experience will show you some of the problems we have to meet.

One of these was a girl of eighteen. Her mother was a widow with seven children. The girl not being able to be taken care of at home was sent away to the home of a brother who was married and lived in a two room cabin. There were seven people living in those two rooms. Think of it. Three double beds in one of the rooms accommodated the seven. The privy was set on the ground near the house and the flies swarmed over excreta and food indiscriminately. A terrible condition.

Another, a boy of twenty whose mother was a widow, went to live with an uncle who said that he would care for him if he were sick. When, however, he saw that the boy was able to move around the house and was not actually confined to his bed he could not believe that he was sick but thought him lazy and insisted that he do his share of the work around the place. Of course we know what the result is in such cases.

Our hearts fairly ache as we are compelled to send these fine young people back to their homes where ignorance and superstition are almost sure to counteract any help that we can give them. They are certain to die and quite as certain to spread the disease among their relatives and friends who in their turn bring it back to us.

There is not a single free bed for tuberculars in the whole state of Kentucky. It makes

me fairly boil when I hear our orators get up and pour out trite phrases about our great and glorious state. If we told the plain cold truth, we would hang our heads and admit that it is a shame the way we neglect our helpless tubercular victims. We see little prospect of help from the state and so we are dreaming. Dreams come before realities and our dream will some day, not far away, become a reality.

We dream of a beautiful little sanatorium located on the south slope of one of our mountains within sight of Berea where our present splendid hospital staff will be able to supervise its operation. Here we will send these boys and girls and coax them back to health and happiness. We will have no trouble about their being willing to go there. Our students soon get the hospital idea and gladly follow our instructions. We will do more when our dream comes true. We will take our entire student body in small groups and by demonstration and lectures educate them in the game of fighting the Great White Plague. It is hard to see how there could be a better opportunity for educational work in this line that such a sanatorium would afford. How could we more surely banish ignorance, fear, and superstition than by such a practical demonstration.

At first our sanitarium must of necessity be small, accomodating possibly twenty-five patients. But there would be plenty of sunshine and fresh air, plenty of good food and a cheery atmosphere making almost certain the return of these young people to health and usefulness. For we get them early, long before they have any idea that they are seriously ill. They can nearly all be cured if we can only give them the opportunity. Then they can go back to their work with the rules of the game well learned and be apostles of fresh air, sunshine, good food, good cheer, and cleanliness.

Some day we are going to get enough people dreaming our dream so that it will come true. What a day that will be for the Kentucky mountains.

Habits formed during the pre-school age determine, in great measure, personality traits that come to light later in life.

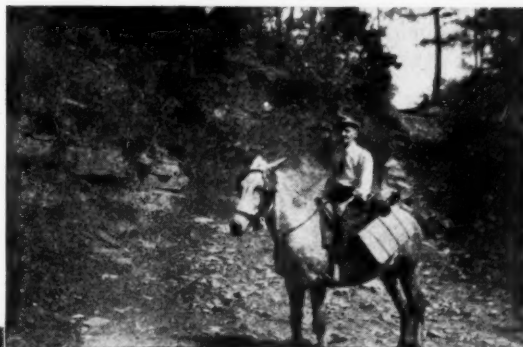
Dr. John E. Anderson.



## Trachoma: Scourge of the Mountains

*Dr. J. A. Stucky, Lexington, Ky.*

To give a wee bit of the history of my work for the splendid people locked in the mountains of Eastern Kentucky, comparing the condition of what I found some years ago on my first visit with the condition of today, as requested by the Edi-



were met there by that splendid man, Frank Gayheart, with a mule for each one of us, and a fourth one to carry the outfit. After a delightful luncheon with Mrs. Hargis, widow of the late Judge James Hargis, we started about 1:30 P. M. What



Top—Dr. Stucky Enroute to Pine Mountain. Lower Left—Fording Troublesome Enroute to the Hospital at Lexington with Wagon Full of Trachoma Patients. Lower Right—Cabin Hospital and Tents, Hindman, Ky.

tor of Mountain Life and Work for this especial Health Number, I find a most pleasing and fascinating task.

It seems just a little while since I made my first trip to Buckhorn at the invitation of Rev. H. S. Murdock, one of God's noblemen and pioneers in educational and health work, but as measured by the calendar it has been seventeen years.

A year later I started for a more remote part of the mountains in Knott County, Hindman Settlement School. Vividly do I recall the ride on the railroad, accompanied by my secretary and a trained nurse, to the end of the road which was Jackson. Carrying all my hospital equipment in bags and satchels, we

a ride it was! The day was beautiful and a mile or two out from Jackson we began to get into the wilds of the mountains. The road beds were creek beds and the viaducts were aqueducts, but the further we rode the more beautiful the scenery became. We were especially struck with the genuine simplicity and sincerity of the people we met, the real Anglo-Saxons. By sunset we had reached our stopping place for the night, a little cabin with three rooms and kitchen. The two women were given one room, Mr. Gayheart and myself another, and the hospitable family occupied the third. We were so weary we slept without rocking and were aroused at daylight to

prepare for the rest of the journey, which was not quite half finished.

After breakfast we again started toward Hindman and when we stopped at noon we were so tired it was difficult to dismount and remount after eating our lunch. About two o'clock we came in sight of a quaint little village built on one side of Troublesome Creek and just across on the other side our destination was pointed out to us. By the time we reached the Settlement the women of the party were so stiff and sore that they had to be assisted to alight, but after a refreshing bath and rest we prepared the cabin which was to be our hospital for the work to begin on the morrow. The numbers that came, and what we saw, heard and felt can never be adequately described in words, but suffice it to say that within four days we had examined over two hundred patients, twenty percent of whom had trachoma.

For three consecutive years we visited this place carrying with us our hospital tents and supplies. Because the cabin would only accommodate six patients at once, after six had been operated upon, they had to be carried out on the hill side to fully recover from the anaesthetic, and in this way we averaged sixteen operations per day, under ether anaesthesia. On the second clinic we had four nurses and one assistant physician with two small hospital tents and the third year the same number of nurses and assistants but with larger hospital tents. The third trip to Hindman will never be forgotten because Troublesome Creek was so swollen that it was dangerous to attempt to cross, either on horseback or in the wagon, but the patients (who were in too serious condition to be operated upon and left in the cabin hospital) must be gotten to the hospital and the trip was made successfully, even though the water came well into the wagon bed, drenching the lower extremities of nurses, doctors and patients.

Too much credit cannot be given Miss Harriet Butler, the nurse in charge at Hindman, who planned the clinics, kept the records and personally assisted the nurses and physicians I took with me. On my return home from the last two visits I came by way of Hazard, saw patients enroute, conducted a small clinic at

Hazard and one at Jackson where we used the parlor of the Ewing Hotel for an operating room.

The roads were indescribable, especially after recent rains had swelled the creeks, and we would have to climb on the side of the banks with the slate bottoms, which John Fox, Jr., describes so vividly in his writings, and which are as weird and beautiful as they are treacherous.

Later on I made two trips to Oneida. After going as far as we could on the railroad we were met by a splendid fellow with a wagon in which we rode the remainder of the way (45 miles) to Oneida. Some of the same experiences were encountered as on our first trip to Hindman. Never shall I forget that man among men, James Burns, who met us about two miles out of Oneida and conducted us on to our apartments in the school building where we were to hold the clinic. This man has immortalized himself and his work by giving his all to help in the educational, social and spiritual betterment of his people. That same year I made a short trip to Frenchburg where a clinic was held in the school there.

For several years the bulk of my work and interest was at Hindman, because I felt the need there was greater. This work was started by Miss Mae Stone, Katherine Pettit, Ethel Delong Zande, Lucy Furman and Harriet Butler and was perhaps the most potential and largest opening wedge in the "all round" salvaging of the natives through an educational program including health, sanitation and vocational training. Later on my objective was Pine Mountain Settlement School, established by Miss Katherine Pettit and Mrs. Ethel DeLong Zande, but this objective was not reached until the fall of 1922. This work with its extension work, especially at Medical Settlement and Line Fork aided by a corps of consecrated workers is doing a splendid service and is growing rapidly.

On the fifth of October 1922 about ten o'clock A. M. my assistant and I stepped off the train at Nolansburg where we were met with mules and pack mules by Mr. Wilson Lewis. After loading the mules we began our climb over Pine Mountain. The view and feelings I had on reaching the top of the mountain are more

indescribable than anything I have ever seen or felt before. I realized from what little I had done and from what I heard and saw that the half had never yet been told of the needs of these splendid Americans. After lunch and rest we descended the mountain reaching the settlement school about four o'clock P. M. This trip was one of inspection to ascertain the needs of the people. One month later, I returned with Dr. E. W. Day of Pittsburg, four of his assistants and one nurse, with a complete modern operating and treatment equipment and we held our first clinic there the four following days. I took with me my secretary and four nurses and with this number of trained and experienced workers we were able to examine, treat and operate on a larger number in a shorter time than at any one of my previous clinics. At each of the places where I have held clinics, I have tried to interest other physicians in the work that they might continue on the foundation already laid.

For more than a quarter of a century I have had patients coming from the interior of the mountain region of Eastern Kentucky with trachoma. At first these patients increased so in numbers each year that I determined I would personally visit the region from whence they came and investigate the cause of the disease. My first trip was, as already mentioned, to Buckhorn in Perry County, after that going to Oneida, Hindman, Hazard, Hyden, Frenchburg, Jackson and Pine Mountain as well as other points that needed help. I realized that the work in the Highlands of Kentucky should be more than a sentiment from a religious missionary viewpoint. They are a part of our State, these people are our people, therefore it is more akin to a family affair, a generous privilege, a humane duty. Our pride, self respect, our loyalty to our State and its citizenship should compel us to give these people who are mountain-locked in the ravines of the eastern part of our State a "fair chance and a square deal."

Missionaries have been sent to them to carry the gospel of salvation of the soul, but the undernourished, diseased, crippled and short-lived bodies, whose disease and deformity could have been prevented or restored to normal condition, were painfully in evidence. From a

humane, moral and economic standpoint we have erred to the point of criminal neglect in that we have not provided for them educational facilities, sanitary instruction, and scientific, medical and surgical care.

The natives of the Highlands of Kentucky are not in a class with the immigrants, which are the sweepings of Europe, neither are they of the "slum element," so well known in our large cities. On the contrary, "they are a peculiar people," a splendid people: honest, loyal, true-minded, pure hearted, generous, hospitable. A people who are mountain-locked, timid, retiring, crowded back by civilization, who have not had a fair chance or square deal from either the State or the Government, a people who live in neglected, pauper counties, with most meager school facilities. A people of genuine Anglo-Saxon lineage, 100 percent American, the Anglo-Saxon trait of deliberativeness clings to them to this day. They decide nothing off-hand, do nothing in a hurry. They are in a feeble way redeeming the land of the wilderness and living a rural life; not possessed of the hurry devil, they travel and live leisurely.

As a result of my report on the prevalence of trachoma in the mountains to the American Academy of Ophthalmology and Oto-Laryngology at Indianapolis in October 1911, the Kentucky State Board of Health appealed to the U. S. Bureau of Public Health at Washington D. C. for assistance to arrest and eradicate the disease in the mountains. This appeal was answered and Surgeon John McMullen was sent to our aid. The appalling condition, as revealed by the U. S. Bureau Public Health Report in Bulletin No. 101, November 8, 1912, is enough to shock and humiliate not only the state but the government. The prevailing and preventable disease, trachoma, is not only painful, but sooner or later in the majority of cases, permanently impairs or destroys vision, thus rendering the victim a burden to self, friends and the state.

What is Trachoma? It is a treacherous disease of the eyelids, beginning in the under surface; an insidious, and stubborn disease, the exact nature and specific cause being as yet unknown, but which will probably be proven to be due to faulty nourishment. It is a disease which can be prevented in the early



stages and can be cured, but which, if neglected, results, in a large percentage of the cases, not only in great suffering and deformity, but in partial or complete loss of vision. In the U. S. report of the Public Health Bulletin, already referred to, of over 4,000 people examined in five counties, 12 1-2 percent had trachoma. At that time the Bulletin printed a list of instructions to those having trachoma as well as to others to prevent them from contracting the disease, emphasizing the fact that the same rigid hygienic care should be taken with trachoma as would be used in any other inflammatory condition. The facts that many of the medical profession do not believe in its infectiousness and contagiousness today, as they did many years ago, and that experience, observation and treatment have given us increasing evidence that it is more of a deficient nutritional condition than one of specific contagious origin, do not justify us in becoming in any way indifferent or careless now in carrying out the instructions given in former days. In following them we have everything to gain and nothing to lose. It is a further fact that clinical evidence has proven that this disease of the eyelids is a local manifestation of a systemic condition, which condition has been proven in hundreds of cases to be the result of a lack of Vitamin A and mineral salts which are contained in whole milk, whole cereals, fresh vegetables and fruits. Total abstinence or the extremely modified use of coffee, tea, coca-cola, tobacco and all super-refined sweets, as well as muscled meats, with total abstinence of any alcoholic beverage, must be adhered to in order to obtain lasting results. If there is painful toleration of light, if the eyes water and vision is impaired, or if there is any thickening of the lids, the afflicted person should immediately be seen by a physician and the proper treatment administered. This disease is usually arrested in a few days if it has not already developed to the extent of involving the cartilage, but we have found that the patient must adhere to a balanced diet until the reconstructive changes have taken place and the body regains its normal power of resistance. This disease is not immediately destructive but is a slowly developing one. It becomes chronic before the vision is impaired

or deformity of the lids occurs and if permanent relief is obtained the after treatment of sanitary or hygienic living with proper feeding must be strictly observed in many cases for several months.

Trachoma is a very old disease, probably as old as the Bible itself. It is also called granulated lids, sore eyes, etc. Those who have it can be cured and those who have not yet developed it can avoid it by learning how to protect themselves. If everyone, men, women and children, will learn about trachoma and take means for its prevention, the disease will in time disappear.

When trachoma begins the eyes feel as though a cinder, corn silk, sand, dirt, sawdust or other substance had gotten into them, and usually some of these things are blamed for the eyes getting sore. The eyes soon become red and painful, discharge water; some pus (matter) is present and the eyelashes stick together in the mornings. Soon the light affects the eyes and in time causes so much pain that it is necessary to wear dark glasses or tie a dark cloth over the head in the effort to keep out the light. The surface of the lids becomes rough, somewhat like sandpaper, and irritates the eyeball with every wink of the eye, often described as "cutting." It is this constant irritation that causes the eyeball to become red and painful. Ulcers appear and a new growth is formed over the pupil, and then the patient is liable to become slowly blind. While the redness, pain and discharges may cease for a time, the disease is almost sure to return unless treated, each attack damaging the eye more and more. Early treatment of trachoma thus becomes necessary and it should be continued until the disease is cured.

In addition to the early local treatment of the eyes in the beginning of this disease we have found by careful study and investigation that the patient needs a balanced diet. By balanced diet I mean, a minimum of one pint of whole milk per day, one or two eggs, not fried, whole wheat bread or bread from unbolted meal, eaten at least two meals per day, with generous servings of tomatoes and other vegetables properly cooked and all seasonable fruits. Sweets, pastries, tea and coffee are forbidden

(Continued on Page 15)

## Spare Babies' Vision

*A Discussion of the Reasons for Putting Drops in the Eyes of Newborn Babies, By B. Franklin Boyer, M. D., Medical Director of the National Committee for the Prevention of Blindness.*

Until recent times the vision of many babies was seriously impaired from infections acquired at the time of birth. Infections of many sorts may invade the birth canal of any expectant mother. In the progress of birth any germs present in the birth canal may readily be forced between the lids to the delicate membrane covering the eye itself.

To spare the baby's vision from these risks of infection certain precautions should always be taken.

The statement "should always be taken" is used advisedly. The germs referred to are microscopic in size and may be present in large numbers without any human eye being able to detect them. Precautionary measures—to use a more technical term, prophylactic measures—are procedures scientifically worked out in the laboratory and in the lying-in room of maternity hospitals, and have been carefully checked up by the microscope.

It is only since the days of modern bacteriology—beginning in the early '80's of the last century—that we have learned to know the germ cause of these infections of the eyes of the newborn babies.

It was at about the same period that we began to recognize the various kinds of germ life that may invade the birth canal of a mother. In the earliest of these studies, too great stress was placed upon the kind of infection commonly associated with immorality. It is true, however, that the most dangerous of all infections afflicting the eyes of young babies is apt to be the same germ that causes gonorrhea in the male and female genital organs. But careful studies in recent years have pretty definitely proven that at the most not more than six out of every ten birth infections are due to this type of infection.

The germ that causes boils, the staphylococcus; certain types of streptococcus, the type so often found in

*(Continued on Page 21)*



Doctor Putting Silver Nitrate Solution in Baby's Eyes.



## Mothers and Babies in Leslie County

*By Martha Prewitt, Kentucky Committee for Mothers and Babies, Hyden Kentucky*

In Leslie County, one of the inner counties of that sparsely settled region known loosely as the Kentucky Mountains, there has come to life a functioning, thriving nursing service that has as its high example the Queen's Nursing Service of Great Britain. The idea was conceived by Mrs. Mary Breckinridge, now the Director, who made the first general survey of the question of native midwives and their methods in 1924. She found conditions in those remote counties including Leslie unbelievably primitive and pitifully inadequate, and of the counties Leslie seemed the most cut-off, the least tended of all.

Mrs. Breckinridge then set to work and formed the Kentucky Committee for Mothers and Babies Inc. The members of this committee were chosen from the leading citizens throughout the state—doctors, lawyers, merchants, chiefs—men and women of high esteem in their communities. A Leslie County Branch Committee was also formed and through them was attained the loyal support of the people of the county.

In the summer of 1925 a thorough, house-to-house survey of the county was made, under the direction of Miss Bertram Ireland, and this preliminary step was rapidly followed by the installation at the county seat, Hyden, of two nurse-midwives, Miss Caffin and Miss Rockstroh. These two are well-equipped as registered American public health nurses and certified midwives in Great Britain—where, due to America's deficiency in the training facilities for nurse-midwives, they had been

forced to go for that special feature of their training. They came into a county that did not have within its borders a licensed physician, a railroad station or an automobile road nearer than twenty miles to the county seat,

that boasted less than half a dozen bath tubs to the county and probably fewer furnaces, in spite of the rigors of the winters here. The people are a proud, intelligent race that the forces of nature and of circumstances have held chained to their small vertical corn fields and occasional rich bottom lands. In money they are poor, but in the heritage of health and a certain calm poise of spirit they are far from paupers. However, the condition of health has probably arisen from the old law of nature—survival of the fittest. It has been found that an abnormal proportion of these children of the hills die at birth or in infancy, and sadder still, many many of the mothers die with them.

It is the especial function of the nurse-midwives to care for the mothers and babies,

but they manage to combine with that a great deal of public health work among the older boys and girls and with their parents. At Hyden, the Nursing Headquarters, they have established regular classes in sewing, first aid, baby care, and general hygiene, and these same classes in sewing will be started in the succeeding centers as they gain momentum and become organized.

For almost a year the Hyden Center had for its quarter a dormitory loaned by the Pres-



Prize Twins Kentucky Committee for Mothers and Babies.

byterian Mission School. Here the first two nurses were joined in December by a temporary nurse, Miss Logan, who was not a midwife, but who could help with the additional work of caring for many pneumonia and "flu" cases. Miss Logan came in twenty miles from the railroad two days before Christmas over frozen roads in a blinding snow storm—and it was her first experience on horseback! One can judge from that the rigors to be endured, but that they are not only endurable but have compensations is witnessed by the fact that Miss Logan is now en route to England to take the midwifery course necessary to become a permanent member of the staff.

In the late fall Mrs. Breckinridge's own home, Wendover, was begun. It is located four miles above Hyden, in a beech grove, on the banks of the picturesque Middle Fork. In spite of the bad weather and terrific difficulties of hauling in winter, the logs of its four walls rose tier on tier, chimneys joined them, ornamental as well as safe asphalt shingles topped them, two baths and a furnace were installed, and in early March Mrs. Breckinridge moved in. This is the administrative headquarters, housing besides Mrs. Breckinridge and her father, the secretary of the Committee, and one nurse-midwife, Miss Halsall. It has a well-equipped dispensary in addition to very comfortable living quarters, and undergoes hospitably accordion-like changes to accommodate the frequent influx of expected and unexpected guests.

The third center has been given by Mrs. Nathaniel Ayer of Boston as a memorial to her Kentucky mother, Jessie Preston Draper—a peculiarly fitting memorial to one's mother—and this is now in process of construction on the upper waters of the Middle Fork where it is joined by Beech Fork. Here the two nurses who arrived early in August, Miss Peacock and Miss Willeford, will be stationed. Their region takes in a lovely, isolated part of the county that in many ways seems hardly to have been intruded upon since Daniel Boone last crossed it. There are gorgeous thickets of rhododendron growing three times the height of a tall man, there are turbulent streams that race headlong through rocky gorges and cascade down the ancient, grooved ledges, and

there are tunnels of evergreens, eerily dark in the noonday glare. The charm and individuality of the country is no where more evident than in that southwestern peak of the county.

The next or fourth center is planned for the opposite end of the country, nearer the railroad, and in its way a very charming section, too. It is hoped that development of this center will be possible in the early spring.

In the meantime the Director is bending her energies toward the permanent nursing headquarters to be built at Hyden. The site has with difficulty been found and purchased. A dweller on the Kansas plains might sigh with delight at the hilly view before him, but a home builder sighs with far different sentiments when he attempts to cement his little home to the slippery steepes of these mountains. There really isn't enough consecutive flat land in the county to have a football field. The contestants might have to climb a ridge to reach each other's goals. With the aid of the Leslie County Branch of the Committee, however, Mrs. Breckinridge was fortunate enough to locate a beautiful site on a narrow fairly elevated plateau above Hyden on a slope of old Thousandsticks Mountain. Here one has an exquisite view up Rockhouse Creek and down the river, and at night across the winking lights of the town, one can make out the calm bulk of the mountains—Tantrough Mountain, the Saddle, and a knob of Owls Nest far to the east.

On this site it is planned to have a substantial stone building which will include housing for two nurse-wives and the supervising nurse, a dispensary and two small hospital wards. The plans which have been generously given by Frankel and Curtis of Lexington, allow for the later addition of a more complete hospital annex. Pending the erection of this building, however, the supervisor, Miss Caffin, and Miss Rockstroh (and later the nurse who will come to take Miss Logan's place) are quartered in a five-room cabin just below the chosen site. To this was added a two-room dispensary shack for temporary use. This commands the same view, but has no conveniences, and will be much given to draughts and chills when winter comes on.

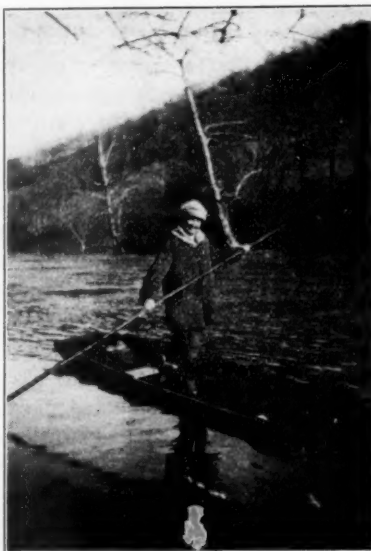
In last April and May, through the co-opera-

tion of the Film Mutual Benefit Bureau, moving pictures were taken throughout the county. Miss Perkins, president of the Bureau, and her assistant, Miss Smith, arrived with the latest modes of portable cameras, numerous appendages, several thousand feet of film. With the aid of a pack horse and a native boy to assist, they made pictures of the various clinics, traders' day—which is in itself an institution—leading citizens and their houses, poorer and more isolated homes, nurses crossing deep fords on their way to visit homes. Special scenes were taken depicting Daniel Boone (represented by a local resident carrying a genuine old flint-lock rifle of the period) shooting an Indian across the river. The Indian incidentally through his name and various reputed bits of data is a possible descendant of Pocahontas. It was a rather raw day and the poor "Indian" had to fall into the river three successive times to be properly "shot" both by the camera man and Daniel. These pictures are now finished and in August Mrs. Breckinridge had a tour arranged for her down the Maine Coast where she used them to illustrate her talks in which she asked for funds. Inasmuch as the work is carried on entirely by voluntary aid, Mrs. Breckinridge has to spend a large part of her time meeting various speaking engagements soliciting contributions. It is amazing and creditable that a work which must perforce be as expensive to carry on has kept functioning so regularly.

In May the people of the Hyden community were solicited for the first time, on behalf of the new center to be built, and it was truly heartening to feel their response. In actual dollars there was a surprisingly good sum; but from the others who did not have the dollars, in teams, in fence posts, in labor, in stone, and even in fodder, there was the touching proof that the Committee had the people of their chosen demonstration ground behind them.

Traders' Day, which I mentioned in connec-

tion with the films, is an exceptionally quaint feature. Many friends of the Committee and of the staff send in boxes of their old or cast-off clothing; anything that is wearable, regardless of one's aesthetic instincts, is acceptable. To prevent pauperizing or injury to any one's pride, these garments are marked at relatively low prices, and the women of each region come to the center on appointed days, bringing produce of any kind to trade. They arrive bearing bags of apples, "pokes" of potatoes,



Nurse Crossing River When Water is too High to Ford.

armloads of rhubarb, baskets of eggs, jars of preserves, and usually two or three children. Exact books are kept of these transactions, though no credit is allowed, and the monetary equivalent is paid to the Committee by the housekeeper of each center. Thus this forms a small source of revenue as well as a practicable way for the women to procure clothes for their ever-increasing families, without which many of them would lack the actual garments to cover them. All ideas of color effects, of form, of individual taste are pushed aside in the real necessity of being clad. Warm, whole winter things best fill the need, and are most gratefully accepted.

Besides the work at the centers, clinics are now held weekly at two other points, too distant to be covered in the regular daily rounds. One of these is at Stinnett, the other on Coon Creek. These clinics minister to the ailments of a wider range of people than could be included in the everyday work of the nurses and form a link with the outlying districts not yet touched by the service. The Stinnett clinic will be discontinued as soon as Miss Peacock and Miss Willeford are established at Beech Fork, for Stinnett then will form the northwest border of the territory.

When one takes into consideration how much has been accomplished in the course of one short year, it seems that the project—which aims eventually to cover the rural districts of

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## TUBERCULOSIS CLINICS IN VIRGINIA MOUNTAIN HOLLOWS

By Agnes D. Randolph

Director, Bureau of Tuberculosis Education, State Board of Health Richmond, Virginia



Upper Left—A Couple of Mountain Children. Upper Right—First Three Patients to All Saint Sanatorium Shown in Lower Picture, Getting Well Fast.

It is bad news which, according to the proverb, travels fast; and certainly we cannot hope to have the news of great scientific discoveries rapidly absorbed into the public consciousness. It is, therefore, not surprising

that the knowledge of the methods of preventing and curing tuberculosis has not penetrated our remote mountain hollows. Consumption is still considered there the incurable, hereditary plague which our forefathers thought it, and a diagnosis is still felt to be almost as fatal as a death warrant.

In 1918 the United States Public Health Service sent a group of medical men and nurses

into the mountain counties of southwest Virginia to help in the influenza epidemic which raged there a few weeks after it had fallen below its peak in the east. It had swept through the most remote of the mountain sections.

There were fearful stories to tell; a household miles from other homes, into which the pitiful wailing of a baby and brought a passer-by to find the dead bodies of mother and father and an almost starved child; mountain ridges aloof from the world, where almost all of the fifty or more persons living there, were ill simultaneously, and the dead lay unburied amid the sick. There were no local nurses;

and the universal ignorance of the simplest nursing procedures making for comfort, and the utter helplessness of the households in the face of the wholesale death, made a picture never to be forgotten.

It was because of this that upon the flimsiest excuse for an invitation the clinic unit was sent into the mountain section. The visit for organization showed plainly how dire was the need of health education. On the little mountain train which carried lumber, freight, and two coaches, there were young mothers feeding their babies coca cola and fried chicken; not just the bones of chicken which a baby could suck, but real fried chicken, which the babies' toothless gums somehow seemed to tear. One watched for a choking splutter and a dead baby; but evidently the little throat and stomach had accustomed itself to such fare, and there was no outward sign of immediate harm. The evidence of ignorance regarding the cure of



Waiting for Examination at a Tuberculosis Clinic.

tuberculosis was painfully demonstrated by the exhibition—with a pitiful pride in the completeness of the treatment—of a cure “by sweating”. The poor patient wrapped in blankets, sat between two blazing hot stoves in August, with every window down, and the door opened with great precaution so as not to let in more air than was absolutely unavoidable. No sweat bath in a hospital had ever been more efficacious. The poor creature sat in torment, with sweat running in streams down his face, his parched mouth giving evidence of the efficiency of the treatment. It was small wonder that the disease was always fatal, if such heroic measures were often applied. Nothing better could have been devised for a speedy

termination of life; and the hollow eyes, the blue lips, the fluttering nostrils, showed that at least the poor soul would not linger here long. Of course, there was no physician, and no argument could convince the family that the “sweating” was not the best method of treatment. They listened politely and promised to give the man a rest; but it would have required eternal vigilance to prevent further use of the sweat bath.

During the first summer we worked in the mountains we gave a week each to six counties. The Legislature in 1916 had appropriated \$5,000 for the State Board of Health to use in an intensive educational campaign against tuberculosis. The money was disbursed by a cooperative arrangement with the Virginia Tuberculosis Association, and local clinics, as concrete propaganda and demonstrations in case finding, were begun. After the State Sanatoria had reached a capacity of over six hundred, the Board thought it wise to assume the entire direction of the clinic service, and in 1922 an appropriation for that purpose was made by the Legislature. One clinic unit with a full time tuberculosis specialist and four field nurses was established. The doctor traveled over the State, giving a week of service to a county, at first reaching only thirty-five counties. The demand for clinics constantly increased, and through the direct tax for tuberculosis work secured for the State in 1918, the Board gradually increased the service to two units, each with a doctor, a clerk, and several nurses. They now give free chest examinations annually in about seventy of the hundred counties. They go into a county only upon invitation; but one unit has a recurring or periodic service in twenty-five towns, also serving the adjacent counties. The field nurses devote their time to home visiting and instruction, the organization work being largely done from the office. In the occasional fields each county is given five weeks of nursing service and for the periodic work each nurse has a definite field. It was the occasional clinic unit that worked in the mountain section that first summer five years ago.

There was not much hope on our part that the people would come, or that coming they would be willing to listen to our advice. The

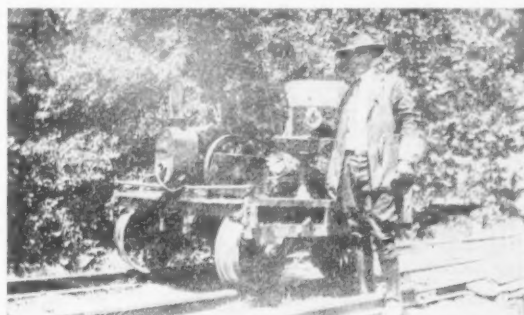


field nurses in our units precede the doctors into counties and spend at least two weeks in home visiting before the clinics are held. Even so, it was difficult for them to penetrate into the remote sections or to spend much time in home visiting. Many of the places were inaccessible except on horseback; and the nurse spent much of her time organizing her committees for each district, visiting her doctors, and securing the cooperation of the school people, the corporation heads in coal and lumber territory, and in other propaganda duties. The clinic day dawned without any idea on our part as to what response we would have.

The crowds that arrived early in the day were a great surprise. By noon there were many more persons than two doctors could have examined in several days, and we had only one doctor, and were to move to another section of the county the next day. It was almost impossible to select the most urgent cases. Patients had probably heard wild tales of the "clinic"; perhaps like the old darkey in a tide-water county who told her mistress that she must get a day off to go to the circus that would be at the court house. She was assured that no circus was in the county but she knew better, and produced one of our clinic dodgers to prove it. So in this remote section, tales of the doctor coming to give free cures must have been spread far; and the sick and the needy came. Suffering people waited patiently all day long for examination; ill people borrowed from some neighbor rickety old spring wagons, and arrived stretched out on straw pallets, too sick to sit up. It was a dreadful day for the unit. There seemed no end to the procession of sick who came for relief. Human strength was limited, and even a summer day brief. There was no sign of distrustfulness and suspicion, only the eager sick who had heard of cure and came for help. The doctor, with a rigid rule as to a maximum number of examinations fixed at thirty, stretched the number far beyond and did not stop even when the long shadows crept down neighboring mountain sides. Night found the workers still busy and later mails from them went up for more time, a second clinic, and a larger service.

Fortunately such days were not frequent. Throughout the summer, and during the fol-

lowing years, the clinics were often crowded to overflowing; but only during that first week was the flood of appeal so fierce. We never found distrustfulness or suspicion but always open hearted hope, if not fixed faith, and gratitude. In only a few places was the nurse denied entrance and rarely was there sign of anything but friendliness. The number of the tuberculous who came to the clinic was a surprise to us; but it seemed to us that there were hosts of other sick. Doctors were few, distance great because of intervening mountain peaks and transportation difficult. Long ago I had seen the utter amazement at my temerity in sending for a doctor when bad symptoms set in in a case I was nursing in the country. Here, in these hollows, death itself walked before the doctor came. In the mines and lumber camps excellent medical care is provided but outside of these corporations, doctors are few and far between. Similar conditions exist in the remote mountain places in my section of Virginia. Clinics in "hollows" or on moun-



A Doctor's Mountain Vehicle.

tain tops, even where there are missions, bring in an avalanche of sick—almost literally the halt, the maimed, and the blind.

Treatment was much more difficult to provide than examination. Milk was scarce, green vegetables and fruit almost unknown. Houses were small and crowded to overflowing. In one section, a philanthropic citizen financed fifteen people for two months at the sanatorium. It was easy to get that number ready to go but, alas, not so easy to keep them. Even though the sanatorium was itself in the mountains, there were many people there, and much

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## The Church vs. Tuberculosis

*Rev. Rector, Lynnwood Parish, Elkton, Va.*

Startling title? Why? Should not the Church be deeply interested in a fight which so intimately concerns the very members of her body?

This recalls what is intended for a complimentary remark by some of the visitors to All Saints House—a remark made more frequently than seems necessary: "That Church is doing something practical!"

Such a statement would seem to imply only casual intimacy with the Church and none too close an acquaintance with the dictionary. Certainly spiritual forces are as useful, as practical, as physical ones. Surely one of the Church's duties is to guide people along the way of life; and there is no borderline, only a pause, between this life and the next.

So it would appear that while the mission of the Church is pre-eminently spiritual, her primary duty is to meet the needs of people as those needs are presented. And not forgetting 1st Cor.: "that was not first which is spiritual, but that which is natural; and afterwards that which is spiritual." In everyday language and according to the thought of many plain, everyday folk, it is the business of the Church to try to meet human needs wherever she finds them.

This means that the country Church has more needs to meet than her sister in the city. Possibly she has a larger work. Boards of education, associated charities, hospitals, orphanages (all originally born of the Church) are plentiful in cities, while in isolated districts sometimes the Church must be all these.

It was on this principle (rather than an effort to overlap existing agencies) that ALL SAINTS HOUSE FOR REBUILDING CHILDREN came into being. Surely if it is of no use to "preach to drowning men" it is equally futile trying to teach or preach to children who

are sick, undernourished, physically and often as a result mentally handicapped.

After five years, during which the rector of this country parish and his wife opened their home to more than fourscore such boys and girls of the mountains—in small groups—exposing them to the contagion of good books, music, pictures, plain wholesome food, rest and recreation, with oftentimes astonishing and most gratifying results, they met another need: the tubercular child.

Ministering to a stricken girl in tiny house back in the hills, this condition came to light. The father, partially crippled, had married a tubercular woman. She had died and one of her children; now the father, and the girl on the threshold of young womanhood had contracted the disease. The latter was sleeping in a darkened, airless room and in bed with three lovely little girls. It was too late to save the girl, or the father. So this "practical" Church fitted up a shed against the house, screened and made it comfortable, supplied bed, blankets, clothing, food and nurse and made that girl's last months as easy as possible—and isolated those children.

But they already had the disease! And the State's sanatoria were crowded. Should three more lives be sacrificed on the altar of neglect?

This practical Church said "no". But it called for the superpractical to set a date for taking those little girls and beginning the fight for their lives, when there was not a bed or a penny available for this or for maintenance. But this Church believes in being daringly practical, and is "fool enough" to believe that where there is a big need and a little faith, that need will be met. God's pocket-book is a large one.

So on December first the little sanatorium, or preventorium, was opened. It is a six-room, two-story cottage, and at the back there were added two five-bed sleeping porches with

nine windows each, all screened, and supplied with the best hospital beds and bedside tables. Below is a large, well-lighted dining room with fifteen windows and a commodious pantry which, stocked, looks like a country store. Two Philadelphia friends, a man and his sister, provided the building, and a Philadelphia woman now deceased supplied the beds. New York friends furnished bedding, sick-room supplies, etc., and a host of friends all over the country contributed liberally toward the hundred-odd other needs.

The little staff is a most fortunate one: the nurse, a graduate of an important Ohio hospital and postgraduate of a large New York city one, seems especially fitted for this work. The dietitian is an English woman with large social-service training, including work in Canada and a Massachusetts State Industrial School. With one inexperienced "maid of all work" these two young women have undertaken their share in creating an institution designed to give free treatment to any early-stage tubercular child of the mountains.

We have the constant advice and assistance, graciously and freely given, of doctors, specialists and dentists of Elkton and Harrison, nearby towns, or the State Sanatorium at Charlottesville, and work always under the kindly, paternal (better "maternal"—for the State Director of Child Welfare is a woman) eye of the State Board of Health.

And we are handicapped: every drop of water for that ten-bed sanatorium has to be carried some distance from a well by members of the staff.

Results: we are very young and inexperienced to begin talking of results. But since December first, thirteen children with borderline, incipient or acute incipient pulmonary tuberculosis, or children with acute lung infections of a different character, have been or are receiving treatment at All Saints Sanatorium. Two New York City slum children also had a short stay there.

The doctors say that ten of these children have entirely "cleared up", and we are now undertaking others. Fifteen pounds is not an unusual gain for three months, and the children have shown almost remarkable physical

and mental improvement. Who shall dare say they have not gained spiritually?

All this is a venture of faith, and (save for the salaries of the staff) not a penny of income is assured. Who will say that it is not "practical"?

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### MOTHERS AND BABIES IN LESLIE COUNTY

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(Continued from Page 10)

America of which Leslie County is but a demonstration—is no pipe dream, but the definite goal toward which it is surely tending. The State Board of Health, though largely tied financially, has done all in its power to co-operate; the people of the community have pledged their aid and trust at every turn; the members of the State Committee for Mothers and Babies have shouldered their responsibilities without question; the citizens of the State have donated generously. There remains but a steady, upward development, with the hope of substantial government and state aid when the demonstration proves itself.

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### TRACHOMA: SCOURGE OF THE MOUNTAINS

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or restricted, as well as highly milled cereals, cane sugar, potatoes, unless baked without peeling, and muscled meats.

Since my first observation trip to the Mountains of Kentucky many years ago, I have been able to keep in touch either personally or through the nurse with the majority of the patients I have treated.

1. One of the most surprising things noted on the first trip was the rarity with which milk, eggs, and butter were used in the diet of the natives. The children scarcely ever drank milk or used butter, and eggs were eaten only once or twice a week. The diet consisted largely of fried foods, coffee, pork and occasionally fresh meat. The vegetables were corn, beans, cabbage, turnips, with fruits raw, dried or preserved.

2. In none of my clinics elsewhere did I find such large tonsils in the throat or such

destructive changes taking place in the nose and ears. I further noted that when these children were operated upon and their food changed, adding milk, butter and eggs with whole cereals to their diet that the entire physical being underwent a most marked change, and where the change in diet was not made, surgical treatment for eye, ear, nose, or throat was unsatisfactory.

3. A balanced diet, with a minimum quantity of refined white sugar, candies or pastries, and a teaspoonful of Cod Liver Oil (called bottled sunshine) two or three times a day for several months rapidly improves the general health, arrests the running ears and noses as well as prevents the usual post-festival diseases.

While conditions are wonderfully improved through the work done by the three ambulatory hospitals established by the Government under the supervision of Surgeon John McMullen and our State Board of Health and the ravages of the disease have been arrested and hundreds now see who would have been blind and worse, the disease has not been eradicated. Unless it be due to a deficiency in nutrition, of one or more of the vitamins (notably Vitamin A), as I am increasingly convinced it is, we are still on doubtful ground as to its specific cause.

A debt of appreciation is due Dr. R. H. Cowley, Berea, Ky., Dr. B. Franklin Royer, National Committee for the Prevention of Blindness, New York City, Dr. J. W. Jervey, Greeneville, S. C., Surgeon John McMullen, United States Bureau of Public Health and our own State Board of Health, for the splendid scientific and educational work they have done in assisting in the arresting and eradication of this disease. The fact remains, however, that there is still much for the physician, nurse, dietitian and school teacher to do.

1. Those who need help most find it impossible to get where they can receive it because of great distance and difficult transportation.

2. Even if they could, they have no means to defray even transportation expenses.

3. Timidity and lack of knowledge make it necessary to carry relief to them.

The greatest need and opportunity I

know of is to give service and money where it will produce the quickest and greatest results.

### PLAY IMPORTANT IN CHILD TRAINING

Play is just as important as work in training a child, according to R. R. Reeder in the Journal of Social Forces. The child's play should not be neglected or left to haphazard methods. Failure to provide opportunity for imaginative plays at the period when the child is most responsive to them may result in his never finding enjoyment in the realm of the imagination.

Space and material for playhouses and encouragement in using imagination and ingenuity to make them as real as possible should be given.

Too much rich food on the one hand and too little exercise on the other is a splendid way to build up a heavy load of toxin in the body that will tax to the limit the strength of the heart. Add a little bootleg liquor and plenty of tobacco and the conditions for a fast and furious heart life are complete.

—Illinois Department of Public Health.

### SEES CHILD LABOR IN CHILD MARRIAGES

Approximately 1,400 children of 14 and 15 years have married and established homes in Kentucky, according to a report in the American Child. The magazine views this form of child labor as seriously as it does factory or sweat shop labor.

These children are not fit either physically or mentally to assume the responsibility of home making. Housework is hard work, requiring greater strength than a 14 year old girl has. Furthermore it is drudgery of the very sort least fitted to a child's ability or inclination.

Such young children have had very little training in their own homes in this sort of work and cannot do it satisfactorily. Besides the harm done to their own health, they are harming the next generation as well. A mother 15 or 16 years old cannot give her child adequate care, physically, mentally or spiritually.

—Hygeia



## DENTAL CLINICS FOR SCHOOL CHILDREN IN NORTH CAROLINA

*Dr. G. M. Cooper, Acting State Health Officer North Carolina State Board of Health*

The State Board of Health of North Carolina, beginning in 1915, made surveys of about 20,000 school children in 12 counties of the State, some of these mountain, some piedmont and some coastal plain counties. Up to that time there was very little local, city or county

North Carolina. It was designed to be enforced through local machinery with the aid and assistance of the State Board of Health as the enforcing agency.

Acting under that law, on July 10, 1918, six dentists were employed for their whole time



Dental Clinic in a School Room.

medical inspection of school children practiced in this State. In the survey mentioned it was found that not less than 80 out of each 100 school children enrolled in the public schools who were examined were in definite need of dental treatment. Following a report made to the legislature that body in March, 1917 enacted the first State Medical Inspection of Schools Law ever put on the statute books of

and assigned to definite counties for a period of a few weeks to offer free dental service to school children between the ages of 6 and 12 years inclusive. The plan devised for the conduct of these clinics was entirely original in almost every particular. No classification of children into rich and poor was undertaken and no fees charged. The work was designed primarily as an educational enterprise for the



purpose of teaching by example and, in addition, to reach and treat a large number of children who could not otherwise have their teeth saved. Each dentist was provided with a portable equipment at the expense of the State Board of Health and all supplies and materials were provided for him to use.

That method has been followed to the present time; and while the law was amended and strengthened by the legislature of 1919 and the appropriations for the work greatly increased, the principle of the enterprise remains the same. From July 10, 1918 to the first of July, 1926, not less than six dentists have been employed all the time (one of them a colored dentist for work among negro school children) and these dentists have worked in every school district, representing every home having children in it, in the State of North Carolina. We have treated to the first of July a total of 199,115 children. The work has been done totally free to the children or their parents and has been done altogether at public expense. The State Dental Society has supported the cause from the beginning and the dentists in the State of North Carolina were never any more prosperous than they are today.

The past winter being the eighth consecutive year of the work, we had a survey made in more than 20 counties, in which 87,000 children were examined, similar to the survey made ten years ago, and we have found that throughout all of North Carolina, at present less than 50 children out of each 100 need dental treatment today as compared to the 80 children out of each 100 needing it ten years ago. The school population of the State has increased by a large percentage, the length of the school term has been increased, and yet so successful has been the educational and prophylactic work done that the results within ten years have exceeded our most sanguine expectation in the beginning of the work.

In addition to the work done by dentists employed by the State Board of Health there are at present about seven permanent dental infirmaries operating on a city and county basis, open the year round, on the same standard principles that the State Board of Health offers the service. In these clinics and through independent efforts fully an equal number of chil-

dren have been treated. The work has been one of the most inspiring ever undertaken by any agency in North Carolina. It has been direct help to thousands of families as well as of enormous educational value and the fine part of the service is that it has been done at the expense of nobody. Nobody has been pauperized, no dentist has been asked to work for nothing, and no child has suffered neglect wherever a state or county dentist has been able to reach him and render the service needed.

There are in North Carolina about 30 strictly speaking mountain counties and the work of the dentist has been especially applied in a thorough-going manner in every school district in those counties. In one mountain county, following the work more than five years ago, the county superintendent of schools made it his business to see that every school child in the county was provided with a clean tooth brush and a pamphlet on prophylaxis. Such an



Toothbrush Drill in Tennessee Mountains.

enterprise is bound to be of inestimable value to this generation of school children in North Carolina. This work will undoubtedly lower the death rate in years to come from heart disease and other conditions arising from neglected teeth, to mention only one phase of the value of the work. The State has not wasted money on providing elaborately equipped automobile or truck with spectacular advertising and so on. But it has required each dentist to own his own car into which the equipment is piled and moved by him from schoolhouse to schoolhouse. The work has been quietly executed, without any bombastic advertising, and work in certain seasons of the year

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## Red Cross Bridges Mountain Chasms

*Miss Alma Chestnut, American National Red Cross, Washington, D. C.*

Progress is ever seeking to advance its frontiers. Just as in the olden time the American pioneer left conquered lands behind him to brave new dangers in the wilderness, the American National Red Cross, the Greatest Mother, continually seeks new fields of service.

Crossing the mountains into the Alleghany Ranges, she has found men, who, like herself, still keep the spirit of the old frontier, who face the same hardships, who daily wage a similar battle with the elements over possession of the virgin soil. To these, hardy sons of the pioneers who settled this country, she is bringing the same messages she brought to the people of the cities, teaching the same lesson to those who stop to listen.

One of the most important services of the Red Cross in the mountains relates to the physical well-being of the people. Doctors are scarce, distances are wide, and the doctor cannot always be reached in a case of sudden illness or an accident. And the very nature of the countryside fosters accidents. The person who has received Red Cross first aid instruction becomes a valuable asset to his community.

No story could illustrate more aptly the possibilities of this field than the story of "Mr. Davis." Some will recognize the story for this first aider is well-known in his particular section of the Kentucky mountains but it will not hurt them to hear it again.

"Dr. Davis," he was just plain Davis then, came to the Foundation School at Berea, Kentucky, where he took a Red Cross first aid "degree" while qualifying to become a school master. His text-book was the standard Red Cross first aid manual; his "internship" was spent upon the mountain-side where he found many opportunities to use his new knowledge.

In the county where he finally was installed as teacher, there was only one doctor and soon,

because of his service, the people accorded him all respect due a bona fide "M. D." One day "Dr. Davis" was called from his classroom to administer aid to a four-year old boy who had swallowed carbolic acid.

Quickly sending his pupils home he rushed to the little boy. First he administered an antidote, then he had the child drink large quantities of cream which helped soothe the burning tissues of his throat and stomach. and then:

"That is all I can do," he told the mother, "now we must get the child to the doctor."

When finally located the doctor was busy with another case.

"The child cannot be saved," he said, "and I am sorry. But carbolic acid is a very deadly poison."

"Dr. Davis" was urged to continue his treatment and did. Under his care the boy gained strength each day and now he is one of the spryest little lads that ever frolicked in blue jeans.

Accidents in mountain camps and in the mines frequently demand prompt first aid treatment for quick action in such cases often means the saving of a life. And even when loss of life is not involved much suffering can be spared. A sprained ankle, a broken bone, bad bruises, a dislocated shoulder, if treated immediately, will result in a far less serious hurt and recovery will be more swift.

All rural teachers should be instructed in first aid, as "Dr. Davis" was instructed. The training would do more than open a new field of service to the instructors in the event of accidents to children under their care. It would enable them to pass their knowledge on to the boys and girls who, in turn, could make valuable use of it.

Establishment of first aid classes in camps and mines would undoubtedly result in much

good. It would be well worth while for the people of the mountains to organize additional Red Cross Chapters in communities where none exist, if only for the reason that this would make available to them the instruction and aid of the National Organization in this type of work.

Many cities have found first aid so valuable that courses are regularly given in schools and colleges. These courses are similar to the one conducted at Berea College where, each year, about one hundred Red Cross First Aid Certificates are awarded students who qualify. In many cities police and firemen are now required to study first aid. This has resulted in their saving countless lives in automobile accidents and fires.

Students of Mrs. C. H. Wertenberger, Red Cross instructor at Berea, have many stories to tell of services they have been able to perform as a result of this training. One writes:

"The third day I arrived home I saw a man sink for the third time in a swimming hole. The spectators seemed helpless. I rushed in at once and brought the man ashore. One of the onlookers said, 'He is as dead as he will ever be.' But I proceeded with artificial respiration and in five minutes had the man breathing. He was able to work the next day.

Another student was able to care for her mother who sprained her ankle in a fall on the stairs. Still another wrote that she had taken charge of a small brother who had an infected wound and that she was able to cure it quickly because of the lessons she had learned in first aid.

Wonderful things are being accomplished, too, by the Red Cross Public Health Nurse who is doing for the mountain schools work similar to that conducted in up-to-the-minute city classrooms. She inspects the children for small defects which might be of serious consequence if left unattended. When she finds bad eyes, diseased tonsils or adenoids, poor teeth, she visits the child's parents to talk it over.

Perhaps the parents did not know this defect or failed to realize that it could become serious. The nurse explains just what the result of negligence will be, persuades them to consult a doctor and, after the defects have been corrected, parents very often are surpris-

ed to note the improvement in Johnny's scholastic work and disposition.

When there is an illness in an isolated home, the Red Cross nurse will go there and quietly take charge. Before she leaves she instructs some member of the family in the principles of home nursing and seldom are the good results of her own work lost. She teaches mothers the newest findings of great doctors in the problem of caring for babies. She gives pre-natal advice to expectant mothers.

And what is the place of the Red Cross Life Saving program in the Highlands? One example has been given of the value of "water first aid." Statistics show that most drowning accidents happen in secluded inland waters. This is because at the big beaches every precaution is taken to safeguard swimmers, while in the "old swimming hole" anything goes. This summer at Brevard, North Carolina, nearly one hundred young men and women of the Southland, many of them from mountain communities, were instructed by the Red Cross in ways to save drowning persons. Enterprises such as this help reduce the hazards of an excellent, health-building sport.

Another chief care of the Red Cross is the ex-service man. Sometimes the Home Service Secretary finds a boy who fought for Uncle Sam losing his strength in a wasting illness, such as tuberculosis, which he contracted during the World War. Perhaps he does not know what his rights as an ex-soldier are, that he can get a compensation from the government, that he is entitled to the best of hospital care. The Red Cross secretary shows him how to fix the necessary papers, helps put his claim through and, while he is being treated in a hospital, sees that his family is cared for while his claim is being settled.

Even the Disaster Relief Service has its mission to perform. Several years ago, at Elizabethtown, Tennessee, a cloud-burst made a raging torrent of the river. Tearing down the valley from the mountains, the storm took a toll of eleven lives and ripped houses from their foundations so that between fifty and sixty were either destroyed or damaged. Trees, rocks, and farm building bowed to the might of the deluge. When the storm passed the farmers found themselves desolate. The Red

Cross, however, stepped in. Quickly the farm-houses were rebuilt or repaired and the farmers put back into their homes. All traces of the catastrophe were removed, all property that was lost was replaced at the expense of the organization. Mountain people said they had no idea the Red Cross did "that sort of work" and the remade community has become a monument to Red Cross service in the Southern Mountains.

### TUBERCULOSIS CLINICS IN VIRGINIA MOUNTAIN HOLLOWES

(Continued from Page 13)

activity. There was not the glorious silence, the still peace of our remote places. Strange people, strange food, strange manners, brought on homesickness of appalling power, and all the fifteen went home before the time was up; many of them the next day after arrival. It has never been easy to induce these patients to stay away from home even in the friendliest of institutions. When we can, they prove valuable missionaries. One field nurse sent off a girl of about seventeen who was induced to stay out her allotted six months. A visit to the home the next year showed the conditions revolutionized; the children were sleeping out of doors, the house cleaned, the diet much improved; and, to exhibit the improvement, there was the proudest little girl that was ever seen. Even where the patient would not go away, the home conditions were sometimes improved by the nurse's visits. The difficulties were, of course, both poverty and isolation; there was not money to provide increased comforts, and no method of securing them, had there been money. Often money was provided by societies or the rich people of the community, and the nurse took sufficient time to demonstrate how the cure should be taken. Persistence on the part of the nurse means much. The reports of the field nurse during the first of her service three years ago are filled with hopelessness about the conditions in one "hollow" where she had already found several patients. Later came reports of examinations, the sending off of sanatorium cases, and persons taking the cure more or less adequately at home. Finally, there is a record showing almost one hundred per-

cent of examinations, and the return to work and to health of many patients. In this community the persistence of one nurse, backed, of course, by the kindness of the physician who treated all cases without charge, has brought renewed health and happiness where without her there would probably have been a record of sickness and death.

It is this patient persistence extending over a long time which is needed. We cannot expect the "good news" of health and cure to travel unaided into these remote sections. It must be carried to them, and the best agency so far discovered to carry it is the public health nurse. The poverty and ignorance which linger there are in large measure due to the inaccessibility of the region. While the remoteness from human contacts makes it more difficult to break down the walls of prejudice and tradition, kindness and eagerness to learn are more frequent among the people than suspicion or hostility.

During the years that the clinics have been scattered through the region great changes in living conditions can be observed. Our service is too brief, however, for a nurse remaining only five weeks in a field to effect decided changes. General nursing service in each county, or better, in each district, would soon wipe out the stain upon our Christianity of this unnecessary and untended illness, and would restore to us, when the long shadows lie athwart our mountain peaks, the sense of peace and power which the Psalmist reflected when he sang, "I shall lift up mine eyes unto the hills from whence cometh my help."

### SPARE BABIES' VISION!

(Continued from Page 7)

sore throat, tooth abscesses, erysipelas; the coccus that causes pneumonia; the germs responsible for liarrhea; the bacillus constantly associated with bowel contents, the colon bacillus; all of these germs on invading the eye as the baby is being born may profoundly imperil vision.

The cautious mother, knowing that unrecognized germs from her own body may have invaded her baby's eyes at birth, will always



insist upon precautionary measures being taken.

By trial, experiment, and laboratory control, obstetricians and ophthalmologists have universally agreed that suitably prepared drops introduced in the eyes of the newborn baby may without harm to the delicate eye tissues cleanse them so thoroughly that the chance of infection is removed. A solution of nitrate of silver, about 1% in strength, is now being furnished doctors and midwives for this purpose in most of the American states and in most progressive countries of the world. These drops are commonly put in a little hollow wax container convenient for the attendant to carry with him to the home of the expectant mother. Occasionally the doctor or the midwife may forget to use these protective measures. The mother, the nurse, all adults interested in the baby's welfare should be on the alert and should insist upon the drops being used in the baby's eyes.

Our earliest American records show that about 28% of all children admitted to our schools for the blind lost their vision as a direct result of infections at birth. The latest statistics from these schools (and these, the reader will please note, are for children above the age of six and set forth results of six years ago) indicate 11½% of last year's admissions were so blinded.

It is within the realm of possibility to remove completely the danger of birth infections. The reader asks, How? The answer is: By use of prophylactic drops in the eyes of every baby immediately after it is born.

#### DENTAL CLINICS FOR SCHOOL CHILDREN IN NORTH CAROLINA

*(Continued from Page 18)*

and work is the word to express it. These dentists work in certain seasons of the year long hours in order to turn away no child who reports to the clinic for work which the dentist realizes is badly needed. No expensive dental gold or porcelain fillings are ever undertaken, but the treatment part of the work is confined largely to the saving of the sixth year molar teeth by putting in amalgam fillings and to the strictly prophylactic phases of oral

hygiene. Thousands of children naturally have been referred to private dentists for a part of all of the work necessary and naturally there is no record available as to what was done for such children; but the value of work thus carried on has been enormous.

It may be of interest to the readers of Mountain Life and Work to know that, in addition to the dental clinics, the same department of the State Board of Health has conducted a series of tonsil and adenoid clinics designed as "follow-up" work to the nurses employed by the bureau. These nurses have during the same period of time examined the school children in about 20 counties a year and up to the present 13,329 children have had operations for removal of tonsils and adenoids done in the emergency clinics conducted by the State Board of Health. These clinics have been held in about 87 of the 100 counties of the State. This present summer 9 clinics have been held in as many mountain counties. Of the more than 13,000 operations there has never been but one death in the clinic and only 2 deaths following within two weeks after operations. This statement of course will be understood by operators everywhere to mean that exceeding care has been exercised in the conduct of the clinics. This particular work has enabled several thousand strictly poor children to receive this operation who never could have received it otherwise.

Only recently the county health officer of Yancey county wrote us, following a clinic conducted there in July in which 41 mountain children were operated on totally free of charge, that he was satisfied that these children could never have received the treatment otherwise and that the operations meant a difference between a healthy, happy future and an otherwise one to each one of these 41 children. Naturally the educational features of this work must continue, as each generation is of course to educate, as if nothing had been done before. The most hopeful and encouraging indication of these efforts is the increasing tendency of the different counties and cities to assume their full responsibility toward their school children and thus to that extent relieve the State from further efforts along such lines.



## BETTER HEALTH FOR OUR TENNESSEE MOUNTAIN PEOPLE

*Malvina G. Nesbit, P.H.N., Division of Public Health Nursing, Nashville, Tennessee*

What of the health of our mountain people? Does their isolation protect them from the communicable diseases that the thickly populated counties fall victims to? After having operated full-time health departments in several of Tennessee's most mountainous counties for a number of years, we find there all the communicable diseases. Some seem to be endemic as diphtheria and typhoid fever; others are brought in by visitors from cities or towns.

Health is and has been a subject of interest and concern to the native mountaineers. They have thrown a veil of superstition and mystery about the ailments of the human body, and so to be slightly ailing is more interesting and distinguished than to declare oneself to be well and strong. For these reasons Public Health had many obstacles to overcome and we had to win the confidence and esteem of these sensitive, fine people by tactful and patient service among them. However, after winning their confidence, it has been demonstrated in our typhoid and diphtheria prophylactic clinics that the response has been wonderful.

Last year one of our units gave a complete immunization against diphtheria to 662 children, and 5,212 persons completed for typhoid. Another County reports 718 complete toxin anti-toxin and 4,447 complete typhoid immunizations. Hookworm and trachoma clinics have been carried on each year until both diseases have been so reduced that neither play an important part with our health problems.

School work in the mountains has been intensely interesting. No one could ask for a more responsive lot of children, or teachers who are more willing to cooperate; and this is where the County Health Units are doing their best work. Here the prophylactic clinics

meet with a ready response and many schools immunize one hundred per cent. Here the nurse organizes her health clubs and through them teaches the rules of personal and community hygiene. Here she finds many obstacles, old traditions, lack of conveniences in the homes, etc., but an ingenious nurse together with a child's natural wish to be strong and well overcome all else.

Nutrition is a serious defect with the mountain

children and grownups, too. Lack of vegetables and milk and sameness of diet. "The growing children are apt to have an insufficient supply of milk due largely to lack of proper feeding for cows. The lack is filled in with coffee. The people are conservative in trying new vegetables," says Miss Phyllis Higinbotham who for the past six years has worked in Sevier County for the Pi Beta Phi School. Physicians are few and a long distance apart in our mountainous counties, so a big problem is the maternity and infant work, and for the want of proper care, our death rates are high.

Midwifery has been and is practiced by unskilled and always very old women and men. This problem has received much consideration by our Units and classes for midwives have

*(Continued on Page 30)*



Baby With Club Feet

## THE INFLUENCE OF SCHOOL ENVIRONMENT ON CHILD

*Adelbert A. Thomas, Director, Health Education, State Board of Health, Louisville*

In the old days one of the favorite subjects for debate was "Be it resolved, that the country is a more healthful place in which to live than the city," and the affirmative usually won the debate, because we have had a perverse notion that God in the glory and wonder of creating an earthly paradise, made the country. He did, but man inhabiting that paradise added to His handiwork bad housing, defective sanitation, filthy methods of disposing of human excreta, breeding places for pests, et cetera, ad libitum, ad infinitum.

Public Opinion on the subject of school health says, "It was good enough for Pa., and I reckon it is good enough for me and my children." This Public has installed radios, bought victrolas, purchased the latest farm machinery, Fords, electric lights, sewing machines, but is content to use the sanitary conveniences that were popular a hundred years ago, and is satisfied with the, too often, dark, dirty, illy constructed box that goes by the name of "school."

What are the factors that make for a wholesome, healthful, school environment? Heating, lighting, seating, ventilation, toilets, water supply. In discussing these physical factors, one must constantly keep in mind their effect on the health of the child.

Heating has to do with the comfort and health of the child, and right here let me pause to say, there are those of our Public who at this junction will rise to state, "that they don't send their children to school to be pampered." Inasmuch as the average child wears heavy winter underwear with heavy top clothes during the cold weather, the temperature of the room should be such that it meets the demands of the children rather than the illy clad, shivering, teacher. When the stove is unjacketed the children who sit in the rows adjoining it are in tropical heat, while those sitting in the rear or next to the windows are uncomfortably cold.

A red hot stove, unjacketed, usually in the center of the room, results in the following conditions: children sitting in all of their out-of-door wraps—little girls even keeping on their hats, boys wearing rubber coats—teacher huddled in her coat or heavy sweater, the room practically airless, a general attitude of listlessness and discomfort among the children.

Proper ventilation consists in having fresh, cool, moist, moving, air in the school room at all times regardless of weather conditions. The windows should be opened top and bottom and deflectors provided. The teacher can make a deflector with a board and two nails, thus preventing the cold air from blowing directly on the children. Too often the problem of ventilation is completely ignored by the teacher. A thermometer is one of the first essentials in estimating successful ventilation.

Closely tied to the problem of heating and ventilation is the fact that soon after we shut the doors and windows and build our first fires in the fall the so called "children's diseases" make their appearance—measles, mumps, whooping cough, diphtheria, colds. The reason is that the school instead of being the safest place for the children has become a veritable incubator for all the diseases children are heir to. Fresh air, being the one thing School Boards do not have to furnish or patrons pay for, is still a stranger to a vast majority of rural schools, and for that matter all other schools.

What has lighting to do with the health of the school child? Since we have paid so little attention to it in the past, the answer would seem to be "nothing." Yet lighting has to do with that most precious thing, eyesight. More windows, properly placed, window shades of the right color, are items in this important phase of school health. In many rural schools

this problem can be solved by a little carpentry by the simple expedient of moving windows from the front and right to the left and rear of the room. Yet how long we have waited, each year taking its toll of vision.

On visiting the scenes of your childhood, mark well the desk in which you sat. If you are fifty, forty or thirty and revisit the scenes of your early education, don't be surprised to find your desk, the heart entwined initials still intact on its surface. The glow of satisfaction should be short lived, however, and you should feel chagrined and ashamed to find young bodies still being molded by the horror that was your desk. Yet we hear the voice of the Public saying, "What's the matter with that desk? I'm alive and kicking and I sat in it." Surely we can profit in the matter of seating, by the old, old adage, "As the twig is bent, so shall the tree incline." Seats that do not conform in any degree with the needs of the human body, make the body conform to them, and we have as a result curved spines, sunken chests, postural defects innumerable.

"The school should set the example for the community in matters of health and sanitation," so reads the Course of Study in Health Education, issued by the State Department of Education. "Sanitary toilets, two in number, conforming to the specifications laid down by the State Board of Health, shall be provided for every school house in Kentucky," so reads the law on the statute books of our state, and yet in a recent survey of health conditions in rural schools we found that over twenty thousand children are going to schools in which there is no toilet of any kind. The idea that we can teach citizenship, health and sanitation, decency and the ideals of right living with such surroundings, is positively ludicrous. However important it is to sanitize the home, it is still more important to have every sanitary convenience at the school, for the school population is representative of both the best and the worst of home conditions and health. How can we expect to improve the standard of living in rural homes as long as such conditions exist in our schools?

When drought deprives us temporarily of water, we deem it a disaster; the papers write about it and we talk about it. There is per-

manent drought in many of our schools today, where, because of indifference, lack of funds or ignorance, there has been provided a school building and teacher but no water supply. In discussing water supply, we must not forget that the serving of that water is of great importance. What real good can be accomplished from text book lessons on sanitation, teaching the menace of the common drinking cup or dipper, when these same children are forced to use one daily? School Boards still furnish buckets and dippers in many counties in our state.

What are some of the remedies for these conditions? I should say that first we should have a teacher fully convinced that health is the first objective of education; that before she can successfully teach health, she must have first secured it for herself. Second, a public so enlightened that problems of child health and school sanitation are considered of paramount importance—an actively interested public that will go out and get the money and make the necessary improvements.

To sum it up, we want for Kentucky children, schools properly equipped to care for them physically, mentally and spiritually; communities with every member an active supporter of a well rounded school health program.

#### TEN RULES FOR ESCAPING TYPHOID

1. Boil drinking water unless sure that the supply is pure.
2. Always wash the hands before preparing food for the table.
3. Always wash the hands before eating.
4. Wash all vegetables that are to be eaten raw and all fruits in water that has been boiled and cooled.
5. Keep food covered.
6. Use covered garbage pails.
7. Screen the house from flies.
8. If there is a case of typhoid in the household or neighborhood, keep out of the sickroom unless you are nursing the patient. Show your neighborliness in other ways.
9. If there is a case of typhoid in the household, disinfect every discharge from the bowels and bladder of the patient.
10. Have a physician vaccinate you against typhoid.

*Hygeia*



## From Our Mountain Nurses

PAGES FROM A DIARY, by Phyllis Higginbotham

The following have been chosen to show the lack of routine, and the unexpected incidents which arise in the day's work of a nurse in the Mountains:

March 16. Tom Jones came about 6 a. m. for me to go over to see his wife, as she had caught the "Flu" from a relative who had come out from Smoke Mountain to spend the week-end with them. Of course, I was furious at the relative; if he had "Flu", then home was certainly the best place for him, instead of broadcasting it round the country.

As she was a pre-natal case and a former "T. B." suspect, I rode over to see her. I found her with a high temperature and severe pain in her side. Afraid of pneumonia, and advised their sending for the Doctor. The small girl of two followed me everywhere, just to be certain that no harm befell her mother, while I prepared a mustard poultice to relieve the pain, and gave an enema.

The family had been up since four, as a matter of routine, so dinner was ready and on the table at ten-thirty, with the men-folk all assembled just as I was preparing to leave, so I had dinner with them. Afterwards stopped to see Tom Huskey, who had succumbed again to the "Flu", and was feeling very sorry for himself. Went on up the creek

to Arthur King's, to see his wife. Stopped to see the McCarter baby on my way home. Went to bed early.

March 17. Said a prayer of thanksgiving at one a. m., when I found there was a full moon, after "Hello" under my window had awakened me to consciousness of the outside world, and to the fact that I was wanted at Joshua Ramsay's. Sent him posthaste to get his nearest friend with a Ford to go for the Doctor, seven miles away although he insisted there wasn't time.

The Doctor arrived at three, and a baby boy at three forty-five. Home after five.

Had a late breakfast about nine, then gave some of the girls in the Home Nursing Class their practical examination. Borrowed "Jacky", aged three months, from the nearest house possessing a baby, so one of the girls could have a real baby to bathe.

Was returning from a visit to a pneumonia case, in the afternoon, when Stella R. met me with the news that

her small cousin had been "fooling with some gun-powder, and had put his eye out." Dashed back to the office for some emergency supplies and hastened to the victim—a manly little fellow of eight, holding a grimy hand over his eye, and trying hard to be brave in spite of the pain.



Top—A Bit of Mountain Road. Bottom—Two Mountain Children



Found he had been sitting in front of the fireplace, taking the powder out of a cartridge, when it exploded in his face and blew ashes and powder into his eye. If he had been in school, where he ought to have been, it wouldn't have happened. Luckily, the outside was burned more than the inside, so after dropping some olive oil in, and waiting till it eased the pain, then getting the cinders and powder out with a swab, I put in more oil, applied a patch, and sent him to the nearest Doctor, with the fervent hope that the latter was not miles away in the Cove.

Saw the first butterfly of the season today; a brown one with creamy edging, and heard the frog-chorus tonight; so a few hardy adventurers are trying to rush the Spring.

#### ANOTHER SUCCESSFUL CLINIC AT COMMUNITY CENTER, WOOTON, KY.

*Nola Pease*

We are glad to report our eighth clinic at Wooton Creek and to say that it was as successful and as much appreciated as the others have been. In the very beginning of our work at Wooton, we realized that because of isolation our children, and older folks too, had not had the medical advice and help that other Kentucky children have had, and we began to plan for clinics under the direction of experts. The State Board of Health has co-operated with us in this work by sending doctors and nurses, thus making it possible for us to serve a good part of Leslie County.

The first tonsil clinic was held in 1920, when Dr. Watkins of Louisville offered his services. Although our Community House was not entirely finished, it made a good temporary hospital, and we were delighted with the people's response and the success of this first venture. In 1921 Dr. T. J. Howe of Louisville conducted an eye clinic. In 1922 Dr. C. B. Kobert, Louisville, Ky., representing the State Board of Health gave three days for tonsil work, and in 1923 Dr. W. C. White of the same city held another tonsil clinic. An eye and throat clinic was conducted by Dr. B. M. Brown and Dr. R. L. Collins of Hazard in 1924. The same year we were very much pleased to secure

the services of a dentist, and D. J. D. Henderson of Mt. Vernon came for our first dental clinic. Since we have a dentist only part time in Leslie County, his services were badly needed. School children were examined and treated first. Then a good many older people were relieved of aching teeth. As it was impossible, in such a short time, to do all the work we had hoped to do, Dr. Henderson promised to return. A second eye and tonsil clinic was given by Dr. Kobert in 1925 and he will return with other doctors and nurses the 29th of this month to hold a third.

While we have not been adequately equipped for extensive medical service, we have hoped for a number of years to have as part of our plant a small dispensary that would serve as a medical center and make us better able to care for the clinics and for our local needs. We are happy to report that this dream has in part been realized and that when Dr. Henderson returned last week for the second dental clinic the dispensary was ready for use. While the building is not complete, the operating room and wards are ready for use, and now we are much better equipped for medical work than we have ever been. Our people contributed much toward the building. They donated all of the rough lumber, the work of excavating, and much work in hauling, stonework and carpentry. We are very proud of our Wooton Dispensary.

During this last dental clinic, 187 examinations were made, with 100 extractions and 113 fillings. A pretty good five days' work, we think. All the clinics have been successful in the fullest sense of the word. They have meant much to the work at Wooton Creek, and we are grateful for the cooperation that has made them possible. We plan to finish the dispensary as soon as possible, and are glad to have its accommodations to offer for the use of the doctors who come to us. We hope it will be able to serve all this part of the county through the ministry of healing.

#### BITS FROM THE DAY'S WORK

*Eva Heney*

*Pine Mountain Settlement School*

Sal and Josiah had just moved back into

their one-room cabin, in the hollow among the hills. Sal had been ailing for seven years, and had tried most of the doctors in the county. For the last few days she had had to "keep to the bed," and was suffering intense pain. When I arrived at dark, on a windy November night, she was lying on one of the three



One of the Homes Visited by the Nurse.

double beds in the room, a picture of distress, with face haggard and drawn, and bones sharply protruding, while a big bouncing two-year old boy nursed at her side. I made her more comfortable and attempted to relieve her pain, and then I explained the necessity of weaning the baby.

This was the first of many visits to a home that illustrated the extreme of misery brought on by poverty and ignorance, yet radiated family love and a wish for better things. I felt hopeful of improvement when I found a few days later that the baby never nursed again.

In January Sal was carried over the mountain on a stretcher and taken to a Louisville hospital, and twelve-year-old Abner, suffering from extreme malnutrition, went with her to the children's hospital. After six weeks Sal returned to find Josiah having abdominal pain, unable to eat or sleep. He too was sent to Louisville, with Sillus, a sixteen-year-old son, partially crippled as a result of fever in childhood, who was to see an orthopedic surgeon and have his tonsils removed. His father was operated on for intestinal ulcer, and left the hospital in a couple of months with instructions not to work for a year. A dark outlook—crops not in, Sal doing just the lightest work, eight-year-old Sarah doing the cooking.

With the assistance of Louisville doctors, hospitals, and Kings' Daughters, the family struggled through the year. Sal is only slightly better. She had been uncared-for too long. But Josiah and Sillus now work every day, and the three children go to school.

Old ideas of health change very slowly here, where herbs and simples and charm doctors have been for so long the only helps for ailments. A few weeks ago I met Mrs. S. riding along on her mule, packing her baby to the doctor. The baby was suffering with thrush. The mother explained that previously when the children had had this disease, she had asked a neighbor woman "who had never seen her pappy," a posthumous child, to blow three times into the baby's mouth, with the result that in two instances the thrush had disappeared. In the case of the third child, however, the charm had failed, so this time she reckoned she would see the doctor woman!

Ben, Berthie, and Becky Ann had bad tonsils. Year after year blanks were sent to their father to be signed for his consent, but he reckoned, as have other parents in this



Traveling in the Mountains.

country, that "the Lord giveth and the Lord taketh away. Blessed be the name of the Lord. The children's tonsils shall not be removed." Each year the children had to work out their infirmity fees for care during ton-

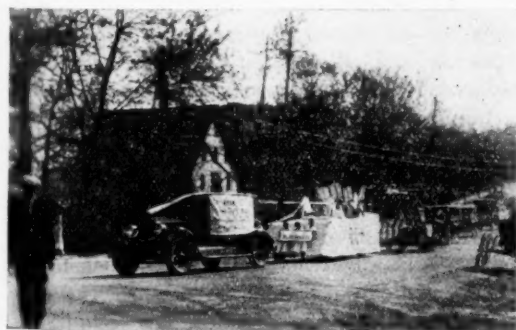
ilitis. But patience won out. Last year the father was attended by the doctor and the nurse during a severe attack of typhoid. Moreover, Brit, an older son, came home from Berea and taught the neighboring school. The father saw things differently. At our tonsils clinic the consents were signed and the tonsils snared.

### OUR HEALTH PARADE

*Conducted by Christine Hartzler, Red Cross Public Health Nurse, Berea, Kentucky.*

On May first, National Child Health Day, Berea had its first health parade. To those who were a year ago bending their energies to stir up interest and secure financial support for a public health nurse for Berea and southern Madison County it was a wonderful evidence of what one short year of real health service could accomplish. Our active health program started in November and on May first most of our organizations of Berea showed their support and enthusiasm in the long line of march.

The parade was reviewed by Dr. Arthur McCormack, Executive Secretary of the State Board of Health, President Hutchins, Mayor Gay, Dr. Best, Chairman of the School Board



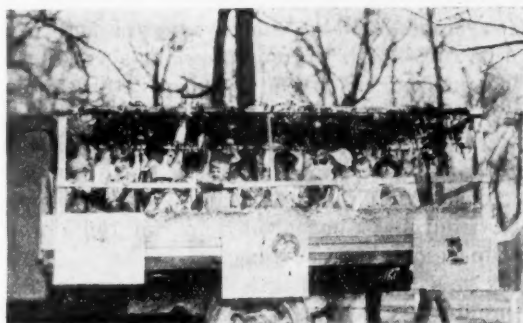
Our Dentists and Our Hospitals Cooperated in the Parade.

and Mr. Benton Fielder, Chairman of Red Cross.

First the Junior Band and Boy Scouts in two big wagons tooted their approval, followed by the children of the Graded School and Training School—all little crusaders carrying their message of health. Then came the Red Cross

float symbolizing the great work of that organization. The dentists of the town had their car and the two hospitals—Robinson and Berea College—each had a beautiful float.

The Echo Club, the young women's organization in town represented "Better Mothers" and the Mothercraft Group of Woman's Club had a float of "Better Babies." Kiwanis Club



Better Babies Float.

marched in line with their big banner, an assurance of "Better Fathers."

Berea College was represented by both the Women's and the Men's Department of Physical Education illustrating the value of gymnastics and recreation, the Garden Class with their tools and posters showing the value of raising more vegetables and the Dairy Class with two real live cows, the true friends of children.

To show that the work reaches much farther than Berea there marched the sixty students from the Normal Department—the Rural Health Crusaders who will carry the gospel of health to the children in the little school houses of our mountain counties.

Bringing up the rear was the Child Welfare Class of the College bearing the large square standard of the Rights of Childhood—Health, Education, Recreation and Better Homes.

Many stood on the side lines as the parade passed by, and we dare hope that the messages of the posters and the enthusiastic interest in health stirred the community to even greater efforts to make Berea a better and safer place for boys and girls to live in.

The parade ended at the Tabernacle where the crowning event was decorating the thirty-

five 100% well children with blue ribbons. It was a great occasion to have Dr. McCormack pin on the badge of their achievement—an achievement which in many cases meant vaccination, painful trips to the dentist, and the still more painful ordeal of having tonsils removed. One child was heard to say after patiently submitting to the discomfort of having a tooth filled, "Come on, Mother, all I have to do now is to be vaccinated and have my eyes tested and then I'll be 100% well." Something has surely been accomplished when the children are leading their parents to the dentists and the doctors.

Dr. McCormack ended the program with one of his stirring, happy speeches which planted the desire in the hearts of many of the listening children to be enrolled in the 100% well group before another year.

It was truly a march of progress in the community, not only of Health but of real Co-operation. As Town and College united in its success the hope is that they may unite in a program which will make Berea not only the Health Capitol of Eastern Kentucky, so christened by Dr. McCormack, but a demonstration center of social progress for the mountains.

### BETTER HEALTH FOR OUR TENNESSEE MOUNTAIN PEOPLE

(Continued from Page 23)

been conducted for three years. In our county the nurse made a study of her available mountain women whom she felt were intelligent enough to practice midwifery and then offered them the classes. Each year she has been gratified by an increased number of younger women taking the classes. The local physicians have taught and demonstrated the mechanism of labor, using a mannikin for their teaching. These classes have served most creditably in emergency cases this year.

Orthopedic work is plentiful but not easy to handle as religious objections are pronounced with the mountain people however. Many corrections have been made. The accompanying picture of the club foot baby was taken when he was only a few months old. He has been under treatment for a year and his feet are straight and he stands and is ready to walk. Tuberculosis as well as venereal diseases are

found in every community, thus our problems are the same in town or mountains but the methods of handling them are vastly different.

I cannot close this article without mentioning the wonderful fortitude of the mountain people. They are the best patients in the world. I saw a child of six come in the nurse's office to have a very large abscess incised. The Health Officer was there so he made the incision without anesthesia and without a murmur from the child. Another child fell from a swinging foot log into the river and cut a deep gash in her forehead. She was only four years old but never a sound did she utter when any dressing was done.

Is it the solemnity and the grandeur of those beautiful mountains or the years of isolation and dependence upon themselves that makes this strength of nerves and fortitude? Yes, the mountain people are fine and deserve all their state can do for them.

### HEALTH LITERATURE

Mrs. Florence Holmes Ridgway

The care of the human body is the most engrossing subject coming before the mind of man from savage to seer. The annals of the development of thought on this subject form a marvellous commentary upon man's endeavor and attainment. The search for the laws of life has always held foremost place in human affairs, and the trail of the long quest is stained with the blood of martyrs and marked with the monuments of heroes.

Thus have we come to a day of rich knowledge in the art of healthful living, and so accessible is this knowledge that no one should be without some of its benefits. Health literature has become almost appallingly voluminous. Never before has so much been published that is sane and wholesome in its influence and attractive in its presentation. Unfortunately, it must be added, the vapid, the false, and the evil have found their way into print with equal celerity, and under the wily guise of physical culture and cure of ills they do a work of frightful devastation.

In selecting health literature one must go



cautiously and allow no attractive phrasing of title or luring commendations to tempt him to possession. Where a person does not have facilities for discovering the value of a book firsthand it is safer to get the judgment of undoubted authorities in hygiene, medicine, and education.

The following list of health materials is meant to be only suggestive. The basis of selection has been that of the needs of mountain homes, schools, and communities. But it must be confessed that there is a great lack of suitable material to meet these needs, especially along adult education lines. Some years ago one of our southern mountain schools began the publication of a series of pamphlets on health, agriculture, education, etc., adapted to mountain conditions. Regrettably, only a few titles were issued but their value was unquestioned. Herein lies a most fertile field and none can till it as well as the men and women who, having a background of educational advantages, are devoting their talents to our mountain folk.

#### For the Home

Delano, J. A.—American Red Cross Text-book in Home Hygiene and Care of the Sick. A book all homemakers should learn to use. Blakiston, \$1.25.

Galloway, Thos. W.—The Father and His Boy. Wholesome sex training through comradeship of father and son. Association Press, \$1.00.

Heeler, Harriet H.—The Story of Life's Renewal. Methodist Book Concern, .15.

Gray, Arthur H.—Men, Women, and God. A discussion of sex from the Christian point of view. Association Press, .60 paper, \$1.50.

Graves—My Health Book. Shows a girl how to be attractive in a natural way. American Child Health Association, .10.

Winchell, Florence E.—Food Facts for Every Day. A text-book, but valuable for home reference. Lippincott, .96.

Calvert, Maude R.—First Course in Home Making. In text-book form but helpful for beginners in home-making. T. E. Smith Co., \$1.20.

Lansing and Gulick—Food and Life. "There is hardly a virtue or an ideal of family, community, and world life which does not take a natural place in the study of the fundamental human problem of food." (Preface). Ginn, .68.

Kinne and Cooley—Clothing and Health. A standard book for elementary schools. Macmillan, .65.

Reaney, Bernice C.—Milk and Our School Children. Useful for both home and school. U. S. Bureau of Education, .02.

Wedgewood, Harriet—Sleep. Should be read by parents as well as teachers. U. S. Bureau of Education, .02.

English, C. H. & Meeker, E. G.—Home Play. Suggestions for recreation in the home and neighborhood. Playground and Recreation Association, .40.

Campbell, C. M.—Experiences of the Child. How they affect character and behavior. National Committee of Mental Hygiene, .10.

The Baby in the House of Health. Children from birth to two years. American Child Health Association, .16.

Runabout in the House of Health. Children from two to six years. American Child Health Association, .10.

#### Attractive and Helpful Pamphlets

My Little Child's Health. A brief outline with valuable references for parents who wish to study the needs of the young child. American Child Health Association, .10.

Edson, Newell W.—Choosing a Home Partner. A pamphlet which sets forth standards by which a young man may not only measure the girl, but also himself. American Social Hygiene Association.

Gielett, Lucy H.—Diet for the School Child. Simple facts for mothers in caring for the child's diet. U. S. Bureau of Education, .05.

Munkres, Alberta—The Mother as Playfellow. Methodist Book Concern, .15.

Lee, Joseph—Rhythm and Recreation. Methodist Book Concern, .15.

#### For the School, Playground and Club

Hallock, Grace T.—Dramatizing Child Health. Chapters on producing plays; a useful volume to grade teachers. Contains plays also. American Child Health Association, \$2.00.

Hallock, Grace T. & Winslow, C. E. A.—Land of Health. How children may become citizens of the Land of Health; with chapters on exercise by Walter Camp. Merrill Company, .72.

Lansing, Marion F.—Food and Life. Study of food designed to help children understand the food foundation of wholesome living. Ginn, .68.

Hill, Hibbert W.—Sanitation for Public Health Nurse. Macmillan, \$1.35.

Wood, T. O. & Dansill, T.—By-ways to Health. Suitable for high school age; interestingly points out the way to success in health. Appleton, \$1.50.

Cobb, W. F.—Chalk Talks on Health and Safety. Macmillan, .80.

Haviland, Mary S.—The Most Wonderful House in the World. The Play House. Good Neighbors. Three very pleasing books for primary grades. Lippincott, \$3.50.

Rucker, Augusta—Ten Talks to Girls on Health. Especially for club leaders to arouse interest in health essentials. Woman's Press, .50.

American National Red Cross—Teacher's Handbook of First Aid Instruction. For use especially with Scouts, Hi-y, Girls' Reserves, and others of high school age. Blakiston, .25.

Adams, Lucy M.—Food for the Body and Food for Thought. Fine for the physical director in teaching proper eating. Woman's Press, .75.

Bragg, Mabel—Suggestions for a Program of Health Teaching in Elementary Schools. Health Education No. 10. U. S. Bureau of Education, .05.

O'Shea, M. V. & Kellogg, J. H.—Health Habits (Revised Edition). Posture, exercise, and eating for primary and intermediate grades. Macmillan, .80.

O'Shea, M. V. & Kellogg, J. H.—Health and Clean-

liness (Revised Edition). Health through cleanliness in city, community, and home. Macmillan, .96.

Armstrong, Donald B.—Community Health. "A remarkable bird's eye view of the community health problem." Funk & Wagnalls, .30.

Child Health Association—Child Health Program for Parent-Teachers' Associations and Women's Clubs. U. S. Department of Education, .05.

Fisher, Katharine A.—The Lunch Hour at School. A valuable standby. U. S. Bureau of Education, .05.

Geister, Edna—The Fun Book. Arranged with appropriate games and party stunts for each month in the year. Woman's Press, \$1.25.

Cook, Estelle—What Shall We Play? A handy little book for schools, clubs, etc. Woman's Press, .30.

Health and Play. For all who help children in their play. American Child Health Association, .15.

The Play Institute—Plans for a Week's Study of the Value of Health, Education, Play, and Recreation. Useful for teaching people how to play. Woman's Press, .15. Every Girl's Health. Gives program material for songs, games, pantomimes, etc. Woman's Press, 2 vol. .75 each.

Official Handbook for Boys. Crammed with interest for boys—even for those who may not have the opportunity to join the Scouts. Boy Scouts of America, .40.

#### For the Children

Griffith, Eleanor G.—Cho-cho and the Health Fairy. Health stories for children in primary grades. Macmillan, .15.

Peterson, A.—Every Child's Book. Alphabetical health rhymes. American Child Health Association, .15.

Peterson, A.—Child Health Alphabet. Health jingles. American Child Health Association, .12.

Zucker, E. & others—Through Story Land to Health Land. A health reader for primary grades; places emphasis upon the happiness to be gained by following rules of health. Noble, .80.

Andress, J. M. & A. T.—Rosy Cheeks and Strong Heart. Attractive third grade reader. American Child Health Association, .32.

Griffith, Eleanor G.—The Little Vegetable Man. The House the Children Built. The Magic Oat Field. The Wonderful Window. Instructive health plays which children enjoy. American Child Health Association, .10.

Andress, J. M.—The Boys and Girls of Wake-up Town. To stimulate health projects in the fourth and fifth grades; story of the health achievements of the children of a sleepy school and community. Boston, Ginn, 1924, 218 p. (Story series in health. Book 2), .76.

Haviland, Mary S.—The Play House. A book on home hygiene which the children enjoy and is designed to make them think about health. Lippincott, \$1.15.

Ferguson, H. W.—A Child's Book of the Teeth. Meant to appeal directly to the child and arouse interest in care of his teeth. Strikingly illustrated. World Book Co. 1919, .44.

Broadhurst, Jean—All through the Day the Mother Goose Way. Mother Goose's children of long ago; what gave them pains and aches and what made them grow. Lippincott, .75.

Jenkins, H. D.—The Perfect Gentle Knight of Old. Suggestions for modern health crusades for modern knights. Pictures of olden time knights. World Book Co.

Boothe, Stella—Mary Gay Stories. About a little

girl and her pleasant acquaintance with such friendly folk as Tooth brush, Vegetable Family, etc. World Book Co., .72.

Below are listed some of the sources from which some of the most useful literature published may be obtained at small cost or sometimes free of charge. Always in writing for U. S. publications address your inquiry to the Superintendent of Documents, Washington, D. C.

#### Government and other Official Publications

Bureau of Public Health Service, Treasury Department, issues public health bulletins, keep-well circulars, etc.; also loans and assists state departments of health by loaning card exhibits, posters, lantern slides and films.

Children's Bureau, Department of Labor, issues bulletins on child welfare, child hygiene, recreation, delinquency, mothers, etc. No better information obtainable on the subjects discussed.

Bureau of Education, Department of Interior, issues publications on school health work. Also useful to parents.

Department of Agriculture, Division of Publications, publishes "Farmers Bulletins" on subjects connected with health, e.g. food, milk, sewage disposal.

State boards of health publishes bulletins and circulars on matters of special interest in promoting health through the home and school.

American Child Health Association, Washington, D. C., issues pamphlets for schools, parents, and children: books, plays, and other educational material. Their publications are always very attractive and useable.

American Medical Association, Chicago, issues pamphlets and other educational materials under such heads as, Nostrum evil and quackery, baby welfare, and sex education.

Metropolitan Life Insurance Co., New York, Borden Milk Co., New York, and some other corporations publish useful pamphlets on health for home and school and, as a rule, distribute them without charge.

From The Woman's Press, New York, The American Child Health Association, The American Medical Association, as well as The Bureau of Public Health Service, Washington, D. C., may be obtained at very slight cost posters on posture, diet, and exercise, graphs, nutrition charts, weight tables, health emblems, playlets, pageants, and scorecards.

#### Periodicals

The following periodicals are sane and safe and useful for school or home.

Hygeia—American Medical Association, Chicago. Most readable and dependable. \$3.00.

Journal of Outdoor Life—National Tuberculosis Association, New York. \$1.50.

Nature—American Nature Association, Washington, D. C. A happy outdoor magazine for children and grownups. \$3.00.

Good Health—Battle Creek, Mich. Stresses diet but generally useful. \$2.50.

Junior Home—1018 Wabash Ave., Chicago. A magazine for children which contains a well conducted health department.

Playground—Published at 315 Fifth Ave., New York. Very helpful to teachers and playground directors in promoting play life.

\*Subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the Bureau of Education.

# MUSIC SECTION

Gladys V Jameson

There are so many tunes for "Barbara Allen", and so many variations of the words, that the tune published here may not be a familiar one, nor the words those most frequently used. This is the melody as sung by Miss Libby Franklin of North Carolina—a very beautiful melody, too; but the words may be used with any tune desired.

## BARBARA ALLEN



All in the merry month of May,  
When the green buds they were swelling,  
Sweet William came from the western states  
And courted Barbara Allen.

It was all in the month of June  
When all things they were blooming,  
Sweet William on his death-bed lay,  
For the love of Barbara Allen.

He sent his servant to the town,  
Where Barbara was a-dwelling,  
My master is sick and sent for you  
If your name is Barbara Allen.

So slowly, slowly, she got up,  
And slowly she came nigh him;  
And all she said when she got there,  
Young man, I think you are dying.

Oh, yes, I'm sick, and very sick,  
For death is on me dwelling;  
No better, no better I never can be,  
If I can't get Barbara Allen.

Oh, don't you remember in yonder town  
When you were at the tavern  
You drank a health to the ladies all 'round,  
And slighted Barbara Allen?

Oh, yes, I remember in yonder town,  
In yonder town a drinking,  
I gave a health to the ladies all 'round,  
But my heart to Barbara Allen.

He turned his pale face to the wall,  
And death was with him dealing,  
Adieu, adieu to my friends all around,  
Be kind to Barbara Allen.

As she was walking o'er the fields,  
She heard the death bell knelling,  
And every stroke did seem to say  
"Hard-hearted Barbara Allen."

Oh mother, O mother, go make my bed,  
Go make it long and narrow;  
Sweet William died for pure, pure love,  
And I shall die for sorrow.

O father, O father, go dig my grave,  
Go dig it long and narrow;  
Sweet William died for me today,  
I'll die for him tomorrow.

She was buried in the old church yard,  
And he was buried a-nigh her.  
On William's grave there grew a red rose,  
And on Barbara's grew a green brier.

They grew to the top of the old church wall,  
Till they couldn't grow any higher,  
They lapped and they tied in a true lover's knot,  
And the rose grew around the brier.

